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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,777	09/30/2003	Jimmie Earl DeWitt JR.	AUS920030477US1	6263

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EXAMINER	
CHAVIS, JOHN Q	

ART UNIT	PAPER NUMBER
2193	

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/675,777	DEWITT ET AL.	
	Examiner	Art Unit	
	John Chavis	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/1/05-8/18/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Specification

1. The disclosure is objected to because of the following informalities: the serial number of related applications is missing, for example, see pages 1 and 2.

Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1 of this application is provisionally rejected on the ground of nonstatutory double patenting over claim 1 of copending Applications No. 10/675,778; 10/675,776; and 10/675,721. Claim 1 also conflicts with claim 2 of Application No. 10/675,872. The present claim 1 appears to be a bit more generic than the others. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: each claim provides for incrementing a counter based on an identified indicator in a data processing system.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 15, 17, 18-20 and 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Pardo et al. (5,754,839).

What is claimed is:	Pardo
1. A method in a data processing system for processing instructions, the method comprising:	See the title and the abstract.
responsive to receiving an instruction at a processor in the data processing system,	See the load instruction in fig. 2.
determining whether an indicator is associated with the instruction; and	See col. 2 lines 30-40 in which logic circuitry derives (determines) watchpoint

	conditions from the instructions (i.e. via an indicator).
enabling counting of each event associated with execution of the instruction if the indicator is associated with the instruction.	See col. 2 line 41-47.
2. The method of claim 1 further comprising: counting each event associated with the execution of the instruction if counting is enabled for the instruction, wherein enabling counting events to analyze execution of the instructions.	" " " "
3. The method of claim 2, wherein the counting step comprises: incrementing a counter associated with the indicator each time the event occurs.	" " " "

Pardo is considered to identify a memory location associated with an indicator (the one with the watchpoint) to enable storing of its indication value, see Pardo's claim 18 in reference to claims 15, 17 and 22.

Claims 18-20 and 23-25 are rejected as claim 1 above.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 4-14, 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pardo as applied to claims 1-3 above, and further in view of the

applicant's choice of merely selecting a system to implement the invention with a cache provided to reduce data access time, as taught by Merten.

Although Pardo is considered to identify a memory location associated with an indicator (the one with the watchpoint); he does not indicate that his system utilizes a cache as specified in claims 4-14, 16, and 21; however Merten (NPL reference, "A Hardware-Driven Profiling Scheme...") teach the feature to detect cache misses, see pages 139-140. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to a person of ordinary skill in the art at the time of the invention to utilize the cache feature, taught by Merten, in Pardo's system to speed memory accesses and reduce the number of cache misses.

It is not clear what the purpose of Spare bit is in claim 6, or what it has to do with counting events; therefore, the feature is not entitled patentable weight. The bit does not appear to be used; it appears to be merely mentioned as an afterthought. In reference to the bundle feature, it is considered inherent for watchpoints to have a beginning and an end to specify what is being watched.

8. Claims 4-14, 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pardo as applied to claims 1-3 above, and further in view of the applicant's choice of merely selecting a system to implement the invention with a cache provided to reduce data access time, as taught by Ammons (NPL reference, "Exploiting Hardware Performance Counters").

Although Pardo is considered to identify a memory location associated with an

indicator (the one with the watchpoint); he does not indicate that his system utilizes a cache as specified in claims 4-14, 16, and 21; however Ammons teach the feature to detect cache misses, see the abstract, introduction and sects. 6.4.1-6.4.2. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to a person of ordinary skill in the art at the time of the invention to utilize the cache feature, taught by Ammons, in Pardo's system to speed memory accesses and reduce the number of cache misses.

It is not clear what the purpose of Spare bit is in claim 6, or what it has to do with counting events; therefore, the feature is not entitled patentable weight. The bit does not appear to be used; it appears to be merely mentioned as an afterthought. In reference to the bundle feature, it is considered inherent for watchpoints to have a beginning and an end to specify what is being watched. Furthermore, see Ammons profiling paths in section 2.1, which specifically indicate those features.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Chavis whose telephone number is (571) 272-3720. The examiner can normally be reached on M-F, 9:00am-5:30pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JC

John Chavis
Primary Examiner AU-2193